

--65. The display device according to claim 64, the scanning lines and signal lines being formed below the projections.--

#### REMARKS

Claims 1-19, 32, 50-51 and 53-65 are pending in this application. By this Amendment claims 1-14 and 50-51 are amended for clarification purposes only, and new claims 53-65 are added. Moreover, claim 52 is cancelled without prejudice or disclaimer. Reconsideration in view of the amendments and following remarks is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Entry of this Amendment is proper under 37 CFR §1.116 since the Amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; and (c) places the application in better form for appeal, should an appeal be necessary. The Amendments is necessary and was not earlier presented because it is made in response to the arguments raised in the final rejection. Entry of the Amendment is thus respectfully requested.

The Office Action indicates that the Information Disclosure Statement (IDS) filed on September 15, 2000 fails to comply with 37 CFR §1.98(a)(2). Applicants respectfully point out that JP 03/192,334 was already considered on May 4, 2001 in Paper No. 5 as indicated in the signed form PTO-1449 that was returned to Applicants. Moreover, U.S. Patent No. 4,007,462 was cited in the September 20, 2000 Office Action.

The Office Action rejects claims 1-19, 47/2-47/19, 47/32, 48/2, 48/3, 48/5-48/10, 48/12-48/19, 49/7, 49/8, 49/11, 49/13 and 50-52 under 35 U.S.C. §102(b) as being anticipated by Yuichi (European Patent No. 6,281,917) or Masayuki (U.S. Patent No. 7,134,288); claims 1-19, 47/2-47/19, 47/32, 49/7, 49/8, 49/11, 49/13 and 50-52 are rejected under 35 U.S.C.

§103(a) as being unpatentable over Shiba (U.S. Patent No. 6,180,294); and claims 48/2, 48/3, 48/5-48/10 and 48/12-48/19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shiba in view of Kim (U.S. Patent No. 5,274,481) or Akins (U.S. Patent No. 5,399,390).

Applicants respectfully traverse the rejections as applied to claims 1-19, 32, 50-51 and 53-65.

In particular, Applicants assert that Yuichi, Masayuki, Shiba, Kim or Akins, either alone or in combination, disclose or suggest a display device, having at least features of which repellency to optical material in a liquid or a liquid precursor of the optical material are substantially different from that of peripheries of the features, there not being a starting material for forming the features at the predetermined positions, as recited in independent claim 1, and similarly recited in independent claims 50, 60 and 61.

Furthermore, neither Yuichi, Masayuki, Shiba, Kim or Akins disclose or suggest a method of manufacturing a display device, having at least steps of forming features of which repellency to an optical material in a liquid or a liquid precursor of the optical material is substantially different from that of peripheries of the features on an object comprising a display of a substrate so that a difference in height between the features and predetermined positions defined by the features is formed, and applying the optical material or the liquid precursor to the surface where the features are formed by an ink jet method, as recited in independent claim 2, and similarly recited in independent claim 5.

Moreover, neither Yuichi, Masayuki, Shiba, Kim or Akins disclose or suggest a method of manufacturing a display device, having at least steps of forming features of which repellency to an optical material liquid or a liquid precursor of the optical material is different from that of peripheries of the features so that the features define predetermined positions at a surface of an object including a display substrate, and applying the optical material liquid or the liquid precursor to the surface of the object having features, as recited in independent claim 7.

Finally, neither Yuichi, Masayuki, Shiba, Kim or Akins disclose or suggest a method of manufacturing a display device, having at least steps of disposing an optical material or a precursor of the optical material at predetermined positions defined by features formed on an object including a display substrate, forming a layer to be transferred, including a plurality of scanning lines and signal lines, pixel electrodes and switching elements, for controlling the pixel electrodes, on a peeling layer formed on a peeling substrate, and transferring the layer onto the object coated by the optical material or the precursor, as recited in independent claim 8.

Specifically, Yuichi discloses a polymer distributed liquid crystal display device having a partition wall 6 composed of water repellent resonant formed at a gap between the areas of the liquid crystal/polymer composite film 5.

Masayuki discloses a liquid crystal optical element having a transparent conductive film 2 formed on the surface of a transparent substrate 1. Furthermore, hydrophilic parts 3 and water repellent parts 4 are formed on the transparent conductive film 2.

Shiba discloses, in Fig. 1a, that portions of the resin layer which are shaded by black matrices 2 are first pattern-exposed through a photo-mask 4 to cure these portions of the resin layers, thereby forming sites 8 (non-colored portions) which do not absorb ink. See generally Figs. 1a-1f and col. 6, lines 44-51. Then the same layers colored in colors R, G and B by the use of an ink jet head 5, and the ink is dried. Shiba further discloses that the forming sites 8 are converted from resin layer 3 by light-irradiation.

Kim and Akins disclose a liquid crystal display with liquid crystal material as the optical material between features.

In contrast to Applicants' claimed invention, Yuichi, Masayuki, Shiba, Kim or Akins, alone or in combination, all fail to disclose or suggest features of which repellency to the optical material in a liquid or a liquid precursor of the optical material is substantially

different from that of peripheries of the features, there not being a starting material for forming the features at the predetermined positions. In fact, the material arranged at positions defined by the forming sites 8 in Shiba is a starting material for the forming sites 8.

Furthermore, Shiba fails to disclose that a difference in height between the features and predetermined positions defined by the features is formed.

Yichi, Masayuki and Kim and Akins fail to disclose that the display device has switching elements, and disposing an optical material by an ink jet method.

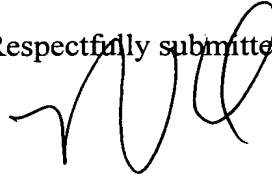
Accordingly, because Yichi, Masayuki and Kim and Akins fail to disclose these features, patterning precision can deteriorate due to the fluidity of the solution of the optical material. Furthermore, because the cited references do not disclose these features, they do not disclose a manufacturing method that is efficient in producing a matrix type display device in which a liquid optical material can be securely arranged at predetermined positions while maintaining characteristics such as low cost, high throughput and a high degree of freedom of the optical material.

Accordingly, Applicants assert that claims 1-19, 32, 50-51 and 53-65 define patentable subject matter. Thus, Applicants respectfully request that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) be withdrawn as applied to claims 1-19, 32, 50-51 and 53-65.

In view of the foregoing, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-19, 32, 50-51 and 53-65 are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' attorney at the telephone number listed below.

Respectfully submitted,



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Attachments:  
Appendix  
Petition for Extension of Time

Date: September 10, 2001

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